Mr. Conrad also observes that mature specimens of $U$. cor are sometimes produced and cuneiform behind, " like some varieties of triangularis of Raf.," (a species, in Mr. Conrad's estimation at that time, embracing the group of pyramidatus etc.

## A NEW CALIFORNIAN LAND SNAIL.

## BY HENRY A. PILSBRY.

Epiphragmophora zechen. sp. Pl. III, lower figs.
The shell is strongly depressed, umbilicate (width of umbilicus contained nearly eight times in greatest diameter of the shell), rather thin. The whorls of the spire and as far as the front of the last whorl are dilute cinnamon, then changing to ecru-olive or dark olive-buff ; there is a chestnut-brown band at the shoulder (about 2 mm . wide), bordered with inconspicuous, hardly noticeable bands paler than the ground-color. Surface is glossy, distinctly, irregularly striate, and immediately behind the lip it is closely and minutely granulose. The spire is a little convex, whorls $5 \frac{3}{4}$, moderately convex, slowly increasing to the last, which is about double the width of the preceding, and decends a little in front. The aperture is broadly lunate, decidedly wider than high. Lip thin, the upper margin scarcely expanded, outer very slightly, basal very narrowly reflexed, the columeller margin broadly dilated.

Alt. 15.2 , diam. 31 mm . ; aperture, alt. 14.3 , width 17.8 mm.

Habitat, San Antonio Canyon, in the San Gabriel Mts., western edge of San Bernardino Co., California, at about 5000 ft . elevation (Miss Lilian Zech).

This fine species will probably prove to belong to the Helminthoglypta group, in which it most resembles $H$. sequoicola (Cooper); yet the absence of malleation on the last whorl and of granules on the spire are features more like Sonorella.

Miss Zech gives the following account of the locality.
The specimen was found in a narrow, winding canyon branching from the main San Antonio canyon at 4700 feet and at this point, some two or three hundred feet higher as near as I can
guess,-only wide enough for the creek bed, then full of rushing water, and the trail. It is a cool, moist, deep canyon,-with columbine, lilies, and ferns-and on the slopes much bay laurel. The trees were incense cedar and big-cone spruce. The snail lay on a pile of rock artificially heaped up at the creek's mouth, and contained the dead animal when found.'"

## DESCRIPTION OF A NEW BIFIDARIA.

BY DR. V. STERKI.

Bifidaria minuta, n. sp.
Shell minute, ovate-conical with the apex nearly pointed, narrowly umbilicate and short-rimate, colorless whitish ; whorls four to four and a half, well rounded with deep suture, the last large, rounded at the base; surface with very slight irregular striæ, apex without striæ, microscopically rugulose ; aperture rather large, well rounded, peristome sharp, not everted, with the ends somewhat approximate, palate with a very slight crest close to and parallel with the margin, inside with a very slight callus or none; lamellæ and folds : parietal rather large, nearly simple, columellar medium, an inferior columellar near the base, or wantirg ; the two principal palatals. Soft parts not examined. Alt. 1.2 , diam. 1 mm . (other exs. $1.0: 0.9$ ).

Hab.: Woods, north of Genera, Ashtabula Co., Ohio. Type : No. 1990, collection of North Am. Pupidre.

This Bifidaria is near tappaniana Adams, but differs from that species as follows : it is much smaller, more conical, the whorls are less in number, more rapidly increasing, more convex, the last is comparatively larger ; there is no callus in the palate or a very slight one, the palatal folds are longer and there are no secondary ones (as supra- and interpalatal).

It was a surprise to find a new Bifidaria in this part of the country, and it appears that the (three) specimens on hand represent a distinct species. If not closely examined, they have the appearance of young or half grown of some other species, and probably were overlooked, partly due to the habit of most Bifidarias of this group of covering their sholls with dirt.

